# BF-W Access Control

# User Manual

**2012.09.26**

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# 1、About BF-W access controllers

BF-W series is designed for both access controls to secure work places like parking space, lift & floor control and time attendance, overtime with personal ID authentication and Time attendance, overtime, shift, rotation.

# 2、Main Features

## 2.1 Features

- Fingerprint ID authentication enhances location security
- Reliable fingerprint ID algorithm applied to lower FRR and FAR rate
- Access control, Time attendance and overtime all-in-one management
- Function keys provide for access control and time attendance
- 4 function keys and 10 numeric keys matrix up to 40 sets of function combination for time attendance
- Lower system maintenance costs
- Flexible in standalone and reader mode for BF-W series applications
- Built-in web server allows modify, download, user management and system maintenance on line

## 2.2 Functionality

### 2.2.1 User account management

- BF-W series provides 4 different types of authentication modes (1.Fingerprint 2.Password 3.RFID Card 4.Fingerprint and Password).
- BF-W series provides 32 sets of combination for department, 32 sets designations for variety.
- Validation for certain user account can be flexible configuration by administrators.
- According to Group setup method to plan schematic time and access control.
- Provides user account list to review individual employee ID, name, status and authentication mode.
- Delete all or certain user account.

### 2.2.2 System administration

- Built-in web server to convenient data modification, data download and user account management over browser.
- 2-Laverage password security for system administration to prevent intentionally modification for system.
- Configurable Terminal ID, Displaying subject, Fingerprint verification level, System maintenance time, Card number format.
- Applicable at different site: Standalone and reader mode.
- Web based modification for terminal setup.
- Web based adjustment for system time: Manual adjustment or Time server daily adjustment.
- Provide up to 40 function key sets.
- Web based user account data backup and restore.
- Web based user list update.

### 2.2.3 Access Control

- 64 Time set，64 Time zone，32 Group，50 Holiday configurable.
- Applicable for lift control system.
- Configurable door lock release time, exit button, and APB(BF-20 relay and Wiegand reader should apply), Door open and delay time.

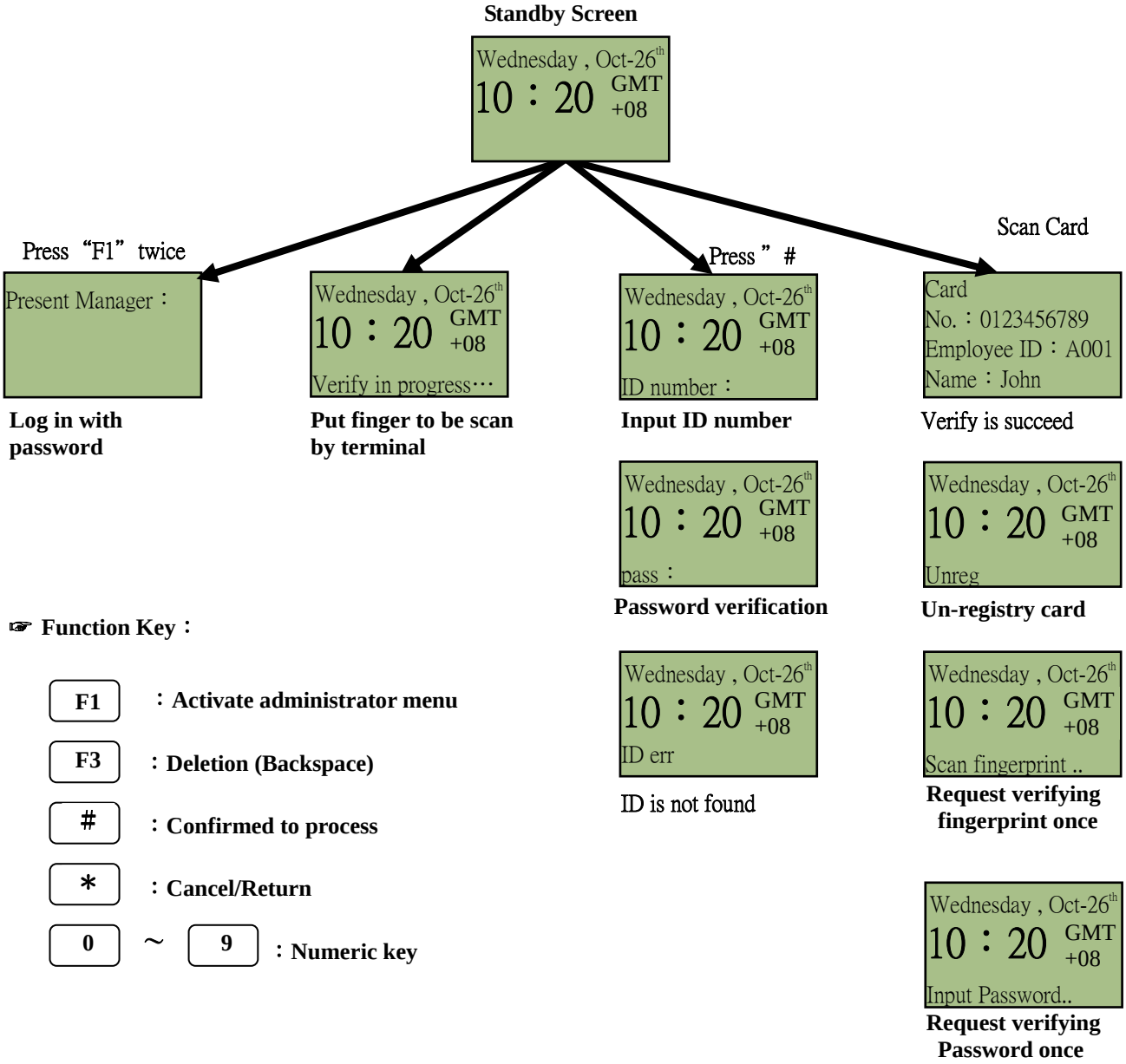
### 2.2.4 Access Log

- Web based real time access log look up function applicable for user account.
- Access log look up method can be combined User ID, Terminal ID, Department, Function keys, Time Zone.
- Web based First In/Last Out access log look up for user account.
- Web based access log report extraction(TXT and XLS).
- Software based log extraction.

### 2.2.5 Verification mode

- BF-W series provide 6 verification mode for user account, including 1.Fingerprint 2.RFID Card 3.Password 4.Fingerprint and Password 5.Fingerprint or Password 6.Fingerprint and Mifare card – for Mifare Terminal only)
- Provide Group, Time Zone, Fingerprint and Password, RFID Card and Password time zone for advance security verification option.

# 3、On screen display setup:

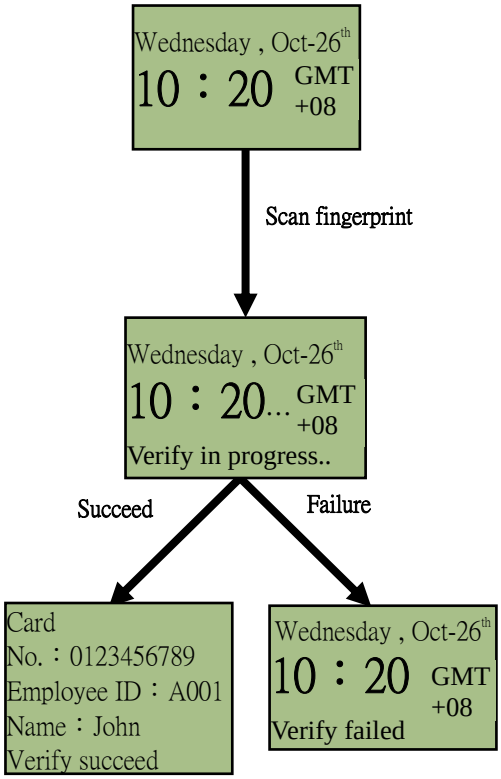



☞ **Function Key：**

| | |
|---|---|
| **F1** | **：Activate administrator menu** |
| **F3** | **：Deletion (Backspace)** |
| **#** | **：Confirmed to process** |
| **＊** | **：Cancel/Return** |
| **0** ～ **9** | **：Numeric key** |

# 4、User Account menu

## 4.1 Fingerprint verification




☞ **Operation mode**

**A. 1：N mode : Less than 1,000 user account (Free-Scan enabled)**

**B. 1：N mode: Less than 1,000 user account (Free-Scan disabled)**

**[ # ] Press＃for 1：N mode**

**Note：1. When Function key applied, Press Function key +“＃”for 1:N fingerprint verification**

**2. When user name is required to be display on BF-6xx-W LCD, registry user account name over Software or Web Server is needed.**

☞ **Function Key :**

**[F1] ：Activate administrator menu**

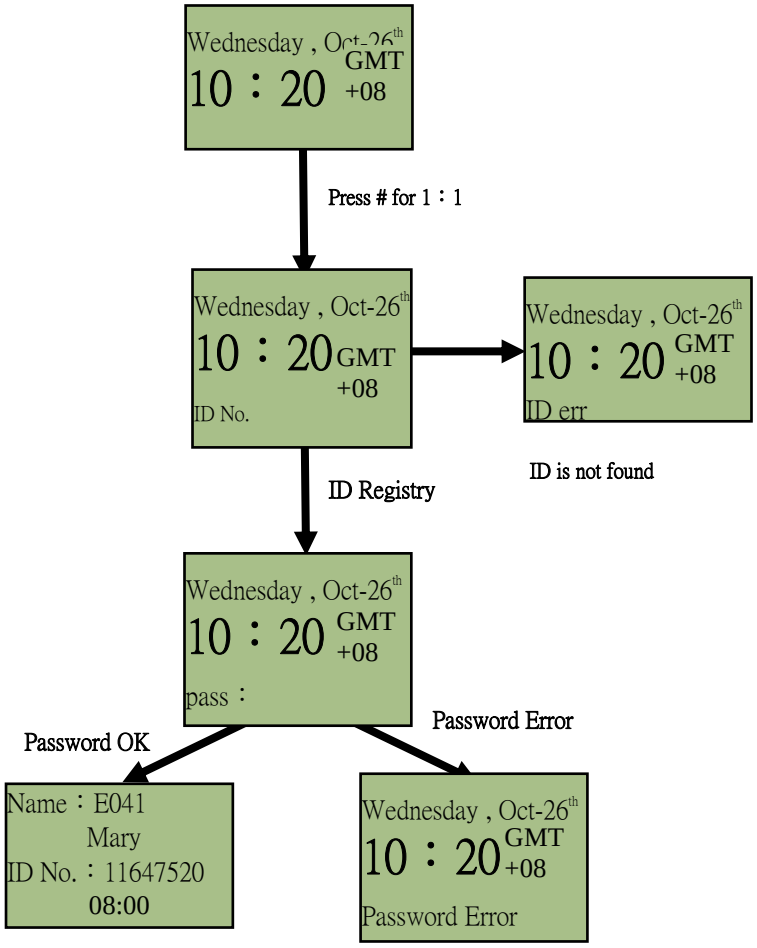
**[F3] ：Deletion (Backspace)**

**[#] ：Confirmed to process**

**[＊] ：Cancel/Return**

**[0] ～ [9] ：Numeric key**

## 4.2 Password verification




☞ **Verification mode：**

**1. (1：1 ) mode: Up to 5,000 user account**

**0** ～ **9** **Input ID**

**#** **Press ＃ to confirm**

**0** ～ **9** **Input Password**

**#** **Press ＃ to confirm**

**2： Scan card over terminal**

**0** ～ **9** **I**

**#** **Press ＃ to confirm**

**Note：1. When Function key applied, Press Function key +“＃”for 1:N fingerprint verification**

**2. When user name is required to be display on BF-6xx-W LCD, registry user account name over Software or Web Server is needed.**

☞ **Function Key :**

**F1** **：Activate administrator menu**

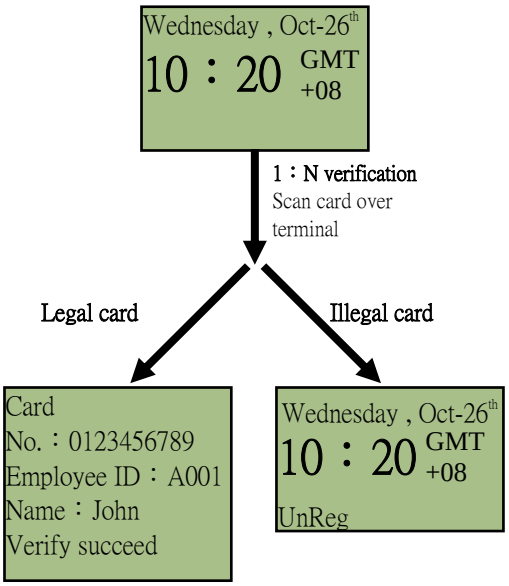
**F3** **：Deletion (Backspace)**

**#** **：Confirmed to process**

**＊** **：Cancel / Return**

**0** ～ **9** **：Numeric key**

## 4.3 RFID Card verification




☞ **Verification mode：**
**Scan card directly over terminal**

**Note：1. When Function key applied, Press Function key +"＃"for 1:N fingerprint verification**
**2. When user name is required to be display on BF-6xx-W LCD, registry user account name over Software or Web Server is needed.**

☞ **Function key：**

**F11** ：**Enable Administrator menu**

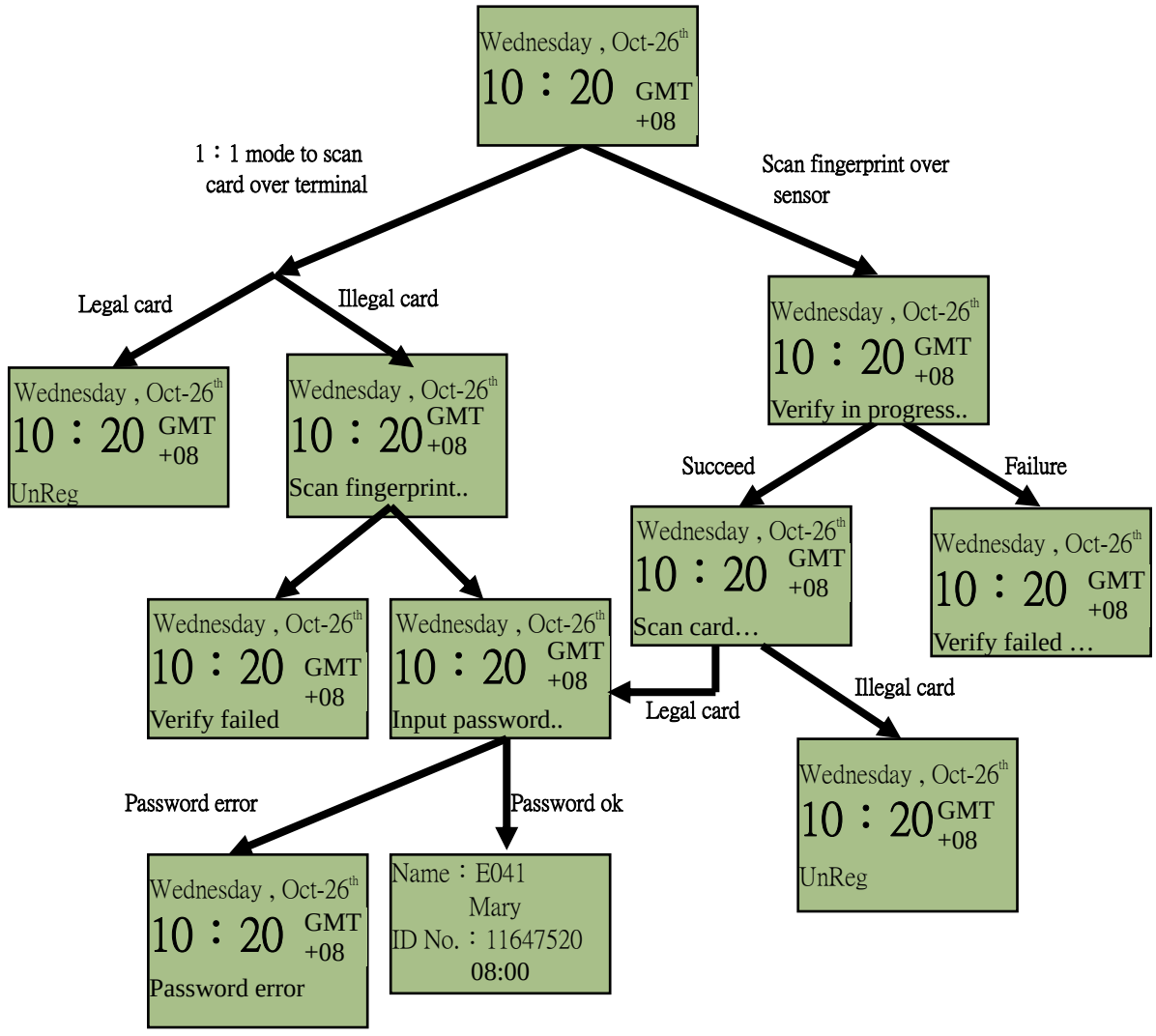
**F3** ：**Delete**

**#** ：**Confirm to proceed**

**＊** ：**Cancel / Return**

**0** ～ **9** ：**Numeric Key**

## 4.4 RFID Card & Fingerprint & Administrator password



☞ **Verification mode：**

**A：Scan card and fingerprint over terminal**

**0** ～ **9** **Input admin password**

**#** **Press＃to confirm**

**B：1：N mode : Less than 1,000 user account**
**(Free scan mode enabled)**
**Scan fingerprint and card over terminal**

**0** ～ **9** **Input admin password**

**#** **Press＃to confirm**

**C：1：N mode: Less than 1,000 user account**
**(Free scan mode disabled)**

**#** **Press＃to 1：N mode**

**Scann fingerprint and card over terminal**

**0** ～ **9** **Input admin password**

**#** **Press＃to confirm**

**Note：1. When Function key applied, Press Function key +“＃”for 1:N fingerprint verification**
**2. When user name is required to be display on BF-6xx-W LCD, registry user account name over Software or Web Server is needed.**

☞ **Function key：**

**F1** **：Enable administrator menu**

**F3** **： Delete (Backspace)**

**#** **：Confirm to process**

**＊** **：Cancel /Return**

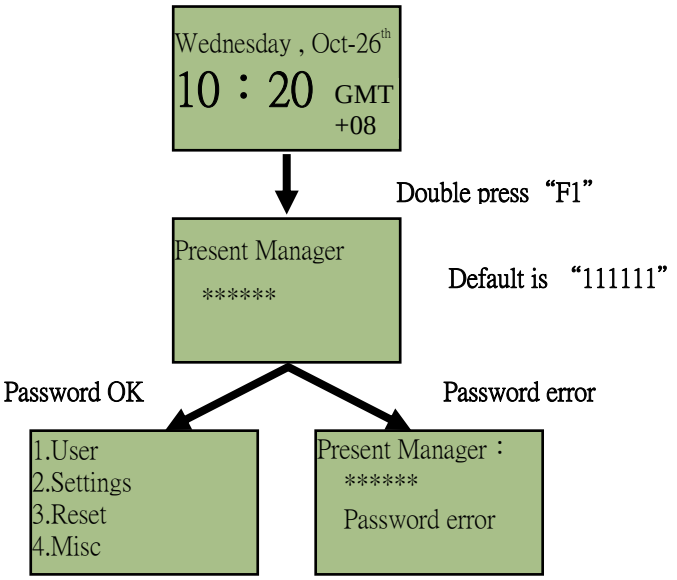
**0** ～ **9** **：Numeric key**

## 4.5 Fingerprint or Password verification

Operation mode is same as section 4.1, the priority for the verification mode is Fingerprint > Password, when password verification failed, system log in will require to input user password.

# 5、 Administrator operation menu

Administrator menu offers registration, modification, delete user account, and system setup. Access to administration mode by double pressing F1 key over terminal.




☞ **Operation：**

F1 **Press ”F1” twice**

**0** ～ **9** **Input 6 digits for password. Default is“111111”**

**#** **Press** # to confirm

**0** ～ **9** **Select by pressing 1～4 items from menu**

**＊** **Press“＊”to exit menu**

☞ **Function Key：**

**F1** **：Enable administrator menu**

**F3** **：Delete (Backspace)**

**#** **：Confirm to process**

**＊** **：Cancel /Return**

**0** ～ **9** **：Numeric**

## 5.1 User

### 5.1.1 Add User：Enroll new user to terminal

#### 5.1.1.1 Enroll fingerprint to system

☞ **Operation：**

**0** ～ **9** **Press 1 for add user**

**0** ～ **9** **Input user ID**

**#** **Input ID by keypad, press # to confirm**

**Scan a blank card**

**#** **Press # to scan fingerprint**

**Put finger to be scan**

**#** **Press # to scan second fingerprint**

**Press * to cancel registry password**

☞ **Function Key：**

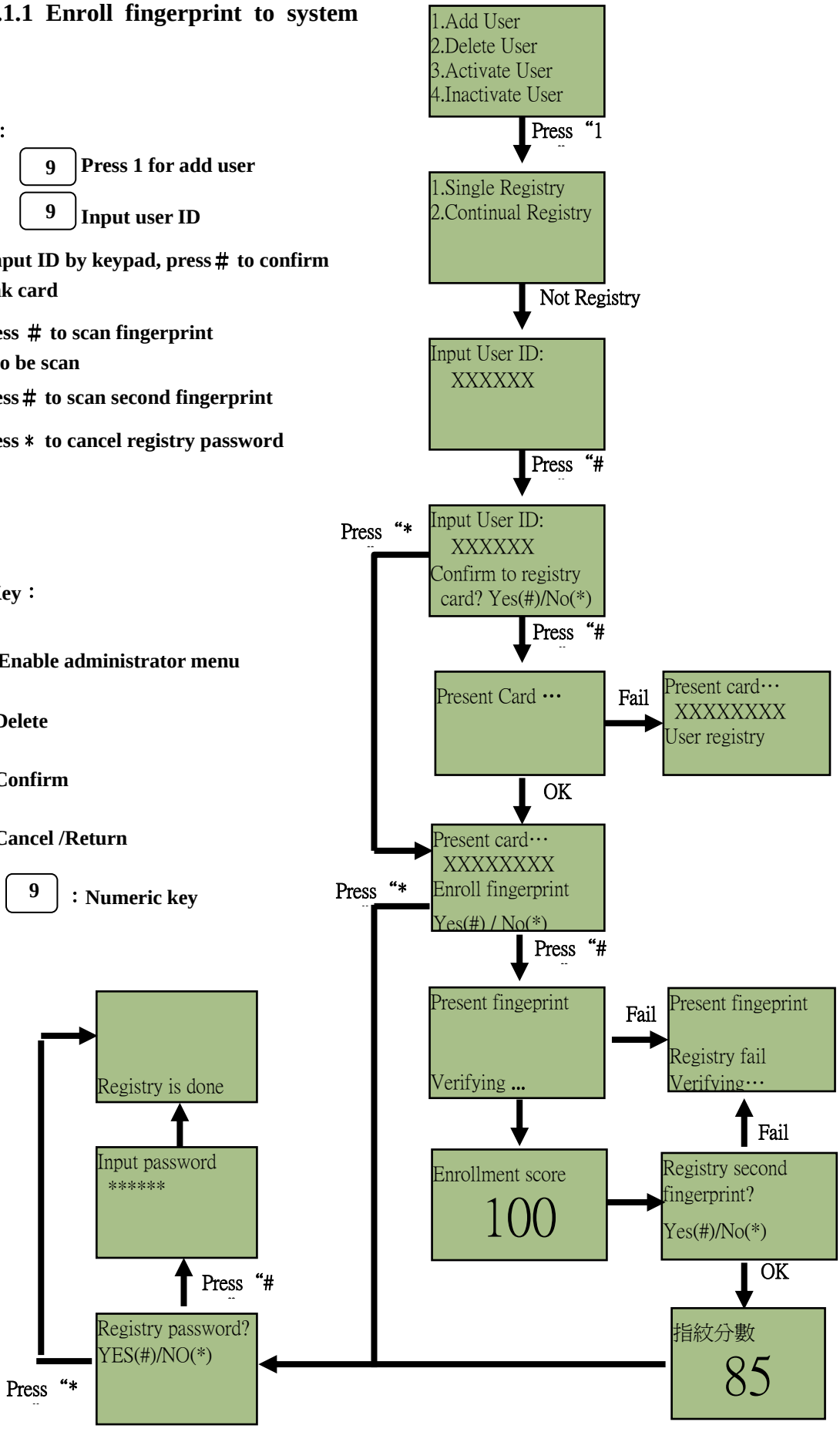
**F1** **：Enable administrator menu**

**F3** **：Delete**

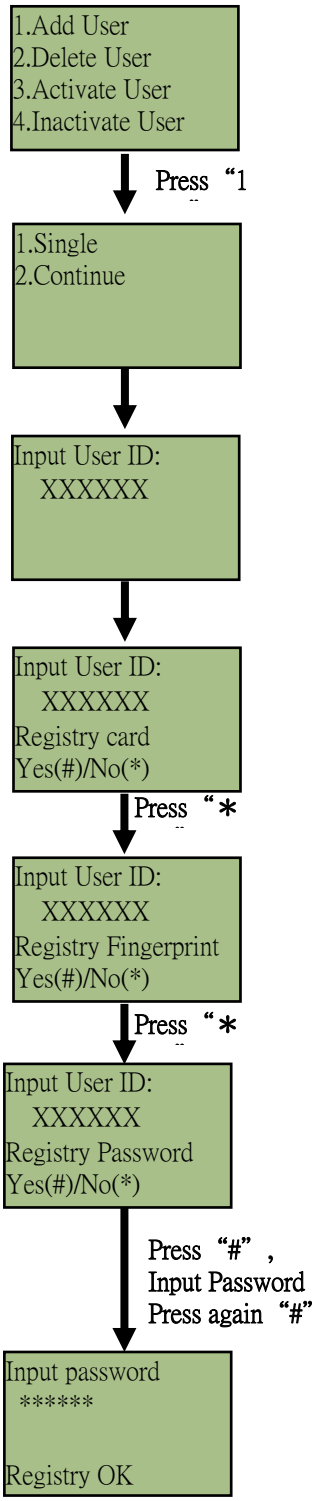
**#** **：Confirm**

***** **：Cancel /Return**

**0** ～ **9** **：Numeric key**



### 5.1.1.2 Registry Password




☞ **Operation：**

**0** ～ **9** **Press 1 to add user**

**0** ～ **9** **Input ID**

**#** **Press＃ to confirm**

**＊** **Press ＊ to cancel card registry**

**＊** **Press＊取 to cancel fp registry**

**#** **Press＃ to confirm password registry**

**0** ～ **9** **Input 6~10 numeric password**

**#** **Press ＃ to confirm**

☞ **Function Key：**

**F1** **：Enable administrator menu**

**F3** **：Delete(Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric key**

### 5.1.1.3 Registry Card

☞ **Operation：**

**0** ～ **9** **Press 1 to add user**

**Add User ID**

**Scan card**

**＊** **Press＊to cancel fingerprint registry**

**＊** **Press＊to cancel password registry**

**＃** **Press＃to confirm**

☞ **Function Key**

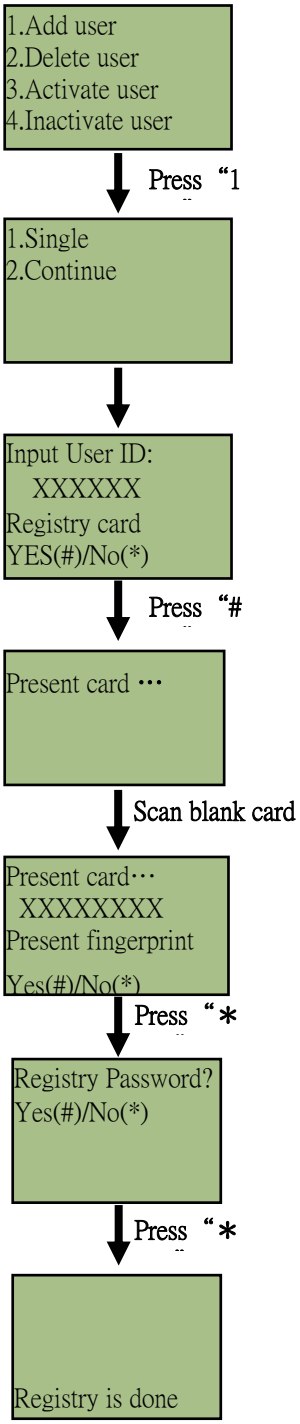
**F11** **：Enable administrator**

**F3** **：Delete (Backspace)**

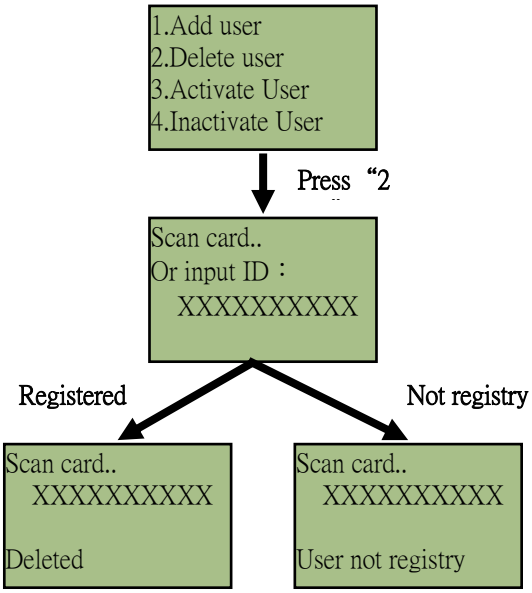
**＃** **：Confirm**

**＊** **：Cancel/Retur**

**0** ～ **9** **：Numeric Key**



### 5.1.2. Delete User：Delete Single User




☞

0 ～ 9 **Press 2 to confirm**

0 ～ 9 **Input ID or scan card**

# **Press＃when input ID over keypad**

☞ **Function key：**

F1 **：Enable administrator menu**

F3 **：Delete (Backspace)**

# **：Confirm**

＊ **：Cancel/Return**

0 ～ 9 **：Numeric**

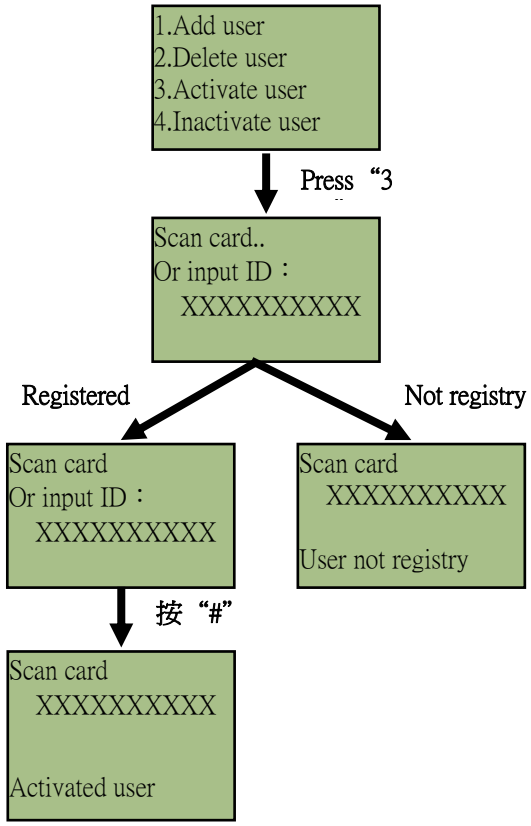
### 5.1.3 Activate user account for BF-W system

☞ **Operation：**

0 ～ 9 **Press 3 to activate user**

0 ～ 9 **Input ID or Scan card**

# **Press＃when input ID over keypad**




☞ **Function key：**

F1 **：Enable administrator menu**

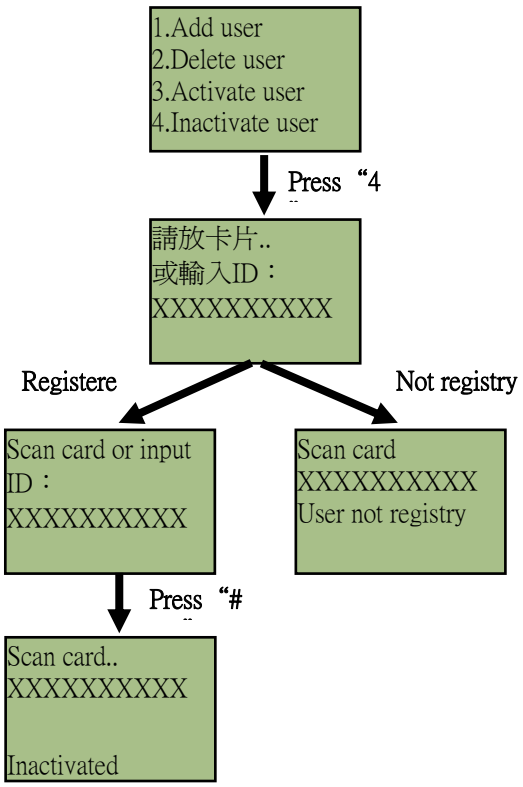
F3 **：Delete (Backspace)**

# **：Confirm**

＊ **：Cancel/Return**

0 ～ 9 **：Numeric**

### 5.1.4 Inactivate User account to BF-W system




☞ **Operation：**

**0** ～ **9** **Press 4 to inactivate user**

**0** ～ **9** **Input ID or scan card**

**#** **Press #to confirm when input ID over keypad**

☞ **Function key：**

**F1** **：Enable administrator menu**

**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric**

## 5.2 System Setup

### 5.2.1 Date and Time：Setup time, date and weekday for BF-W

☞ **Operation：**

**0** ～ **9** **Press 1 to set system time**

**0** ～ **9** **Input time format as HHMMSS**

**#** **Press＃ to confirm**

**0** ～ **9** **Input date format as YYMMDD**

**#** **Press＃to confirm**

**0** ～ **9** **Input weekday: Monday~Sunday**

**#** **Press＃to confirm**

☞ **Function key：**

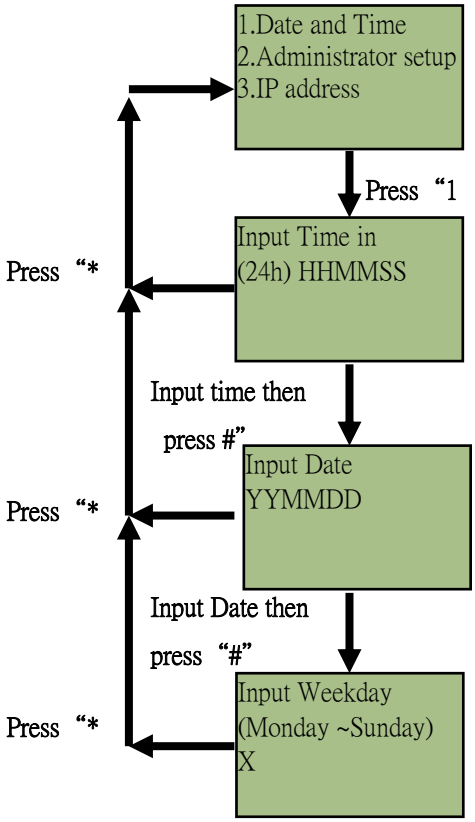
**F1** **：Enable**

**F3** **：Delete (Backspace)**

**#** **：Confirm**

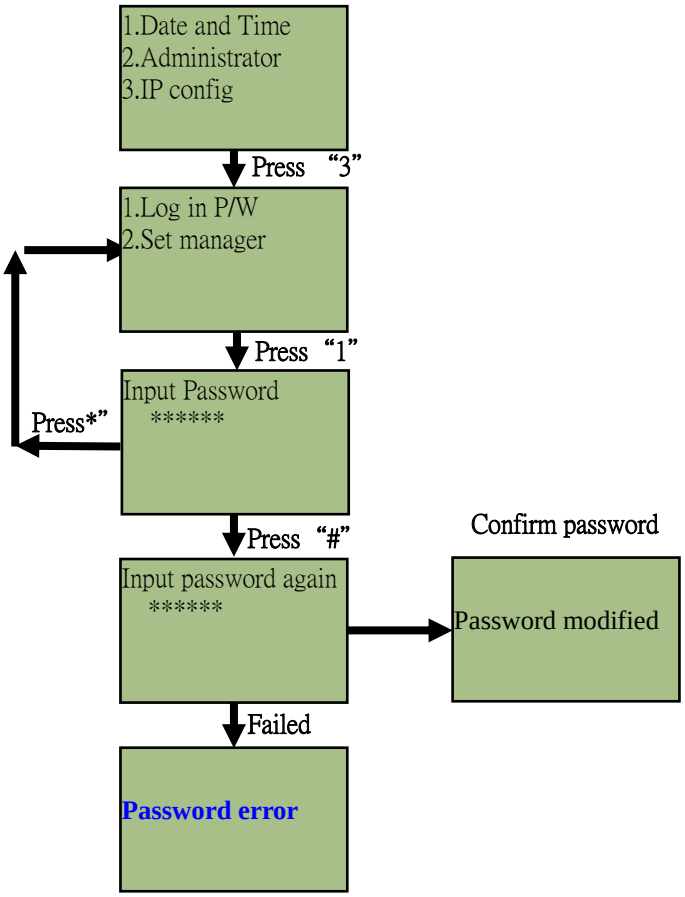
**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric**



### 5.2.2 Admin setup: modify admin password and setup certain user to be system administrator

#### 5.2.2.1 Modify system administrator log in password




☞ **Operation：**

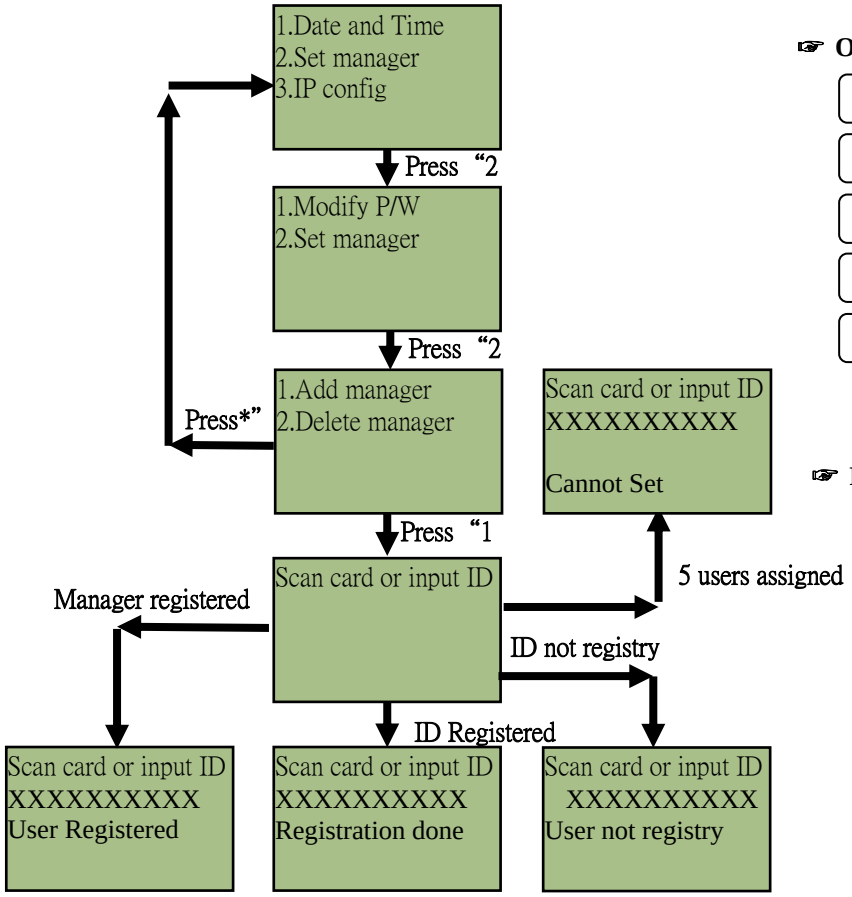
| | | | |
|---|---|---|---|
| 0 | ～ | 9 | Press 2 for Administrator setup |
| 0 | ～ | 9 | Press 1 to modify admin password |
| 0 | ～ | 9 | Input 6 digits password |
| # | | | Press # to confirm |
| 0 | ～ | 9 | Input new password in6 digits |
| # | | | Press # to confirm |

☞ **Function key：**

| | | |
|---|---|---|
| F1 | | ：Enable administrator |
| F3 | | ：Delete (Backspace) |
| # | | ：Confirm |
| * | | ：Cencel/Return |
| 0 | ～ 9 | ：Numeric key |

### 5.2.2.2 Set manager

**5.2.2.2.1 Set manager to system：5 Users can be assigned for administrator for system**




☞ **Operation：**

**0** ～ **9** **Press 2 to set manager**

**0** ～ **9** **Press 2 to configure user**

**0** ～ **9** **Press 1 to confirm new manager**

**0** ～ **9** **Input ID or Scan card to set manager**

**#** **Press # to confirm when input ID over keypad**

☞ **Function key：**

**F1** **：Enable**

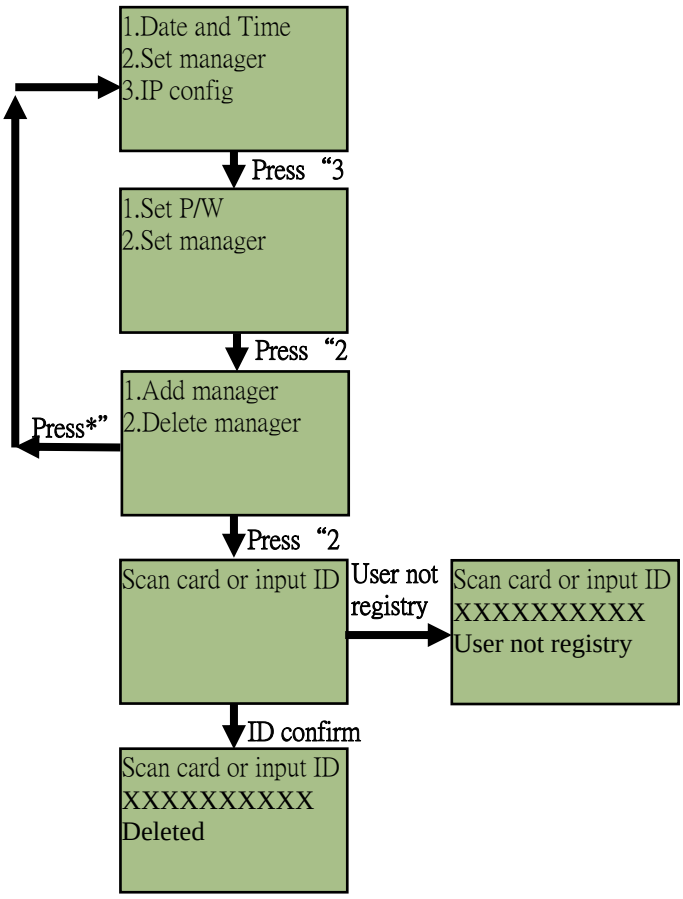
**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric key**

**5.2.2.2.2 Delete manager：Delete manager for system**




☞ **Operation：**

**0** ～ **9** **Press 2 to set manager function**

**0** ～ **9** **Press 2 to set manager**

**0** ～ **9** **Press 2 to delete manager**

**0** ～ **9** **Input ID or scan card**

**#** **Press # when input ID over keypad**

☞ **Function：**

**F1** **：Enable administrator**

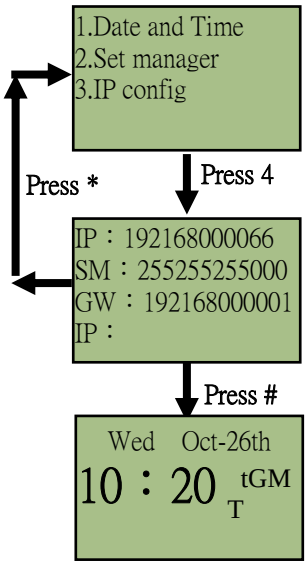
**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric key**

### 5.2.3 IP Configure: Setup IP address for BF-W system




☞ **Operation：**

**0** ～ **9** **Press 4 to set IP**

**0** ～ **9** **Input IP、Subnet mask、Gateway**

**#** **Press #to confirm**

**Note：IP,** Subnet mask, Default Gateway format as:

**IP format will be: 192168000012**
**Subnet mask will be: 255255255000**
**Default Gateway will be:192168000001**

☞ **Function：**

**F1** **：Enable administrator**

**F3** **：Delete (Backspace)**

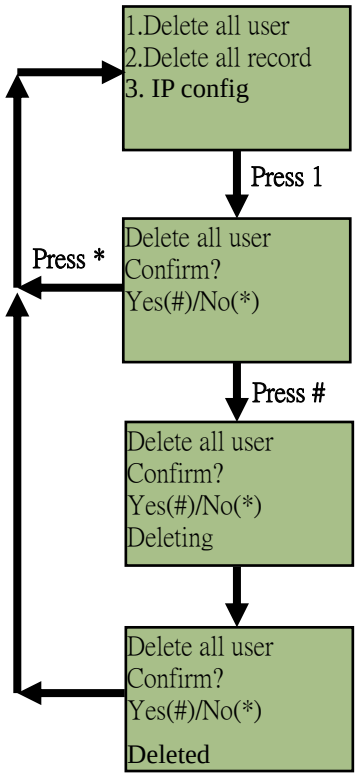
**#** **：Confirm**

***** **：Cancel/Return**

**0** ～ **9** **：Numeric key**

## 5.3 System restore and delete

### 5.3.1 Delete all user




☞ **Operation：**

**0** ～ **9** **Press 1to delete all user**

**#** **Press＃ to confirm**

☞ **Function key：**

**F1** **：Enable administrator menu**

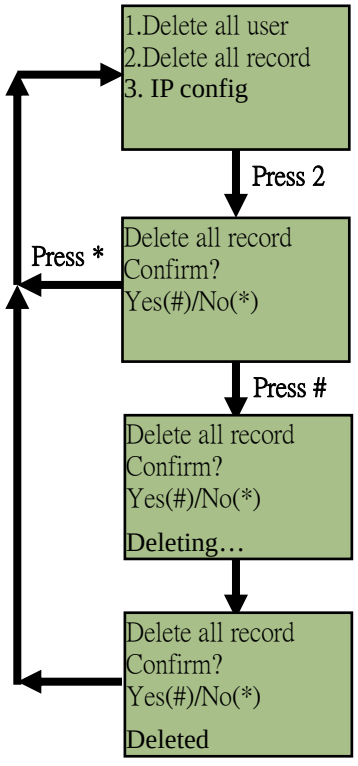
**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric**

### 5.2.3 Delete all record :




☞ **Operation：**

**0** ～ **9** **Press 2 to delete all**

**#** **Press＃to confirm**

☞ **Function key：**

**F1** **：Enable administrator menu**

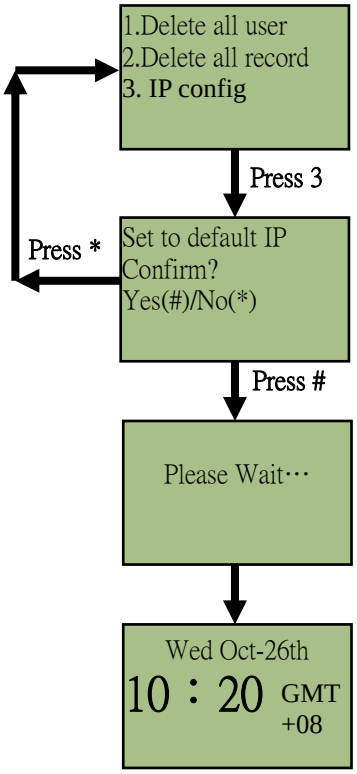
**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric**

### 5.3.3 IP Config：Reset to default IP




☞ **Operation：**

**0** ～ **9** **Press 3 to set to default IP**

**#** **press # to confirm**

☞ **Function key：**

**F1** **：Enable administrator menu**

**F3** **：Delete (Backspace)**

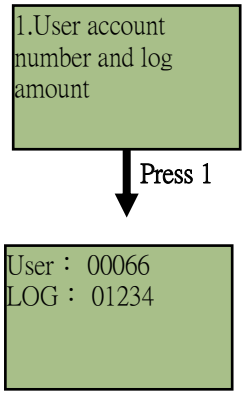
**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric**

## 5.4 Misc.

### 5.4.1 User and log: display registry user account number and log entry amount




☞ **Operation：**

**0** ～ **9** **Press 1 to check user and log number**

☞ **Operation：**

**F1** **：Enable administrator menu**

**F3** **：Delete (Backspace)**

**#** **：Confirm**

**＊** **：Cancel/Return**

**0** ～ **9** **：Numeric key**

# 6、Technical information for BF-W series

## 6.1 Physical features

- CPU board
- Keypad/LCD
- Fingerprint Module (BF-630W)

## 6.2 Power consumption

6.2.1 Voltage

- +9V--+30V DC

6.2.2 Currency

- General power consumption： 600mA, 12V /avg.
- Max power consumption：800mA, 12V

## 6.3 Environment

6.3.1 Temperature and Humidity

- Operation Temperature：0℃ to 55℃
- Storange Temperature：-20℃ to 70℃
- Operation humidity：0% to 90%
- Storage humidity : 0% to 90%

6.3.2 ESD and protection

- Surge protection：Sarial port 15kv ESD
- Magnetic protection：Ethernet port 1.5kv

## 6.4 Communication

- 1 RJ-45(10/100M)
- 1 RS-485 (compliant to RS-485 standard)
- 1 Wiegand output (OD0，OD1)

## 6.5 Relay

- Access control relay (COM, NO, NC)，AC 120V/2A、DC 30V/2A
- Tamper switch * 1
- Exit button * 1
- Fire alarm * 1
- Door bell * 1

## 6.6 User capacity

- Up to 950 user account, two fingerprint template each person (BF-630W) , one set Card ID and one set Password

## 6.7 Log capacity

- Up to 65536 log entries

## 6.8 Dimension

- CPU board：109mm(H) X 82mm(W)
- LCD/Keypad：106mm(H) X 82mm(W)
- BF-W : 125mm(H) X 145mm(W) X 33(D)

## 6.9 Weight

- 340g

## 6.10 Fingerprint template size (BF-630W only)

- 256 ~ 384 bytes

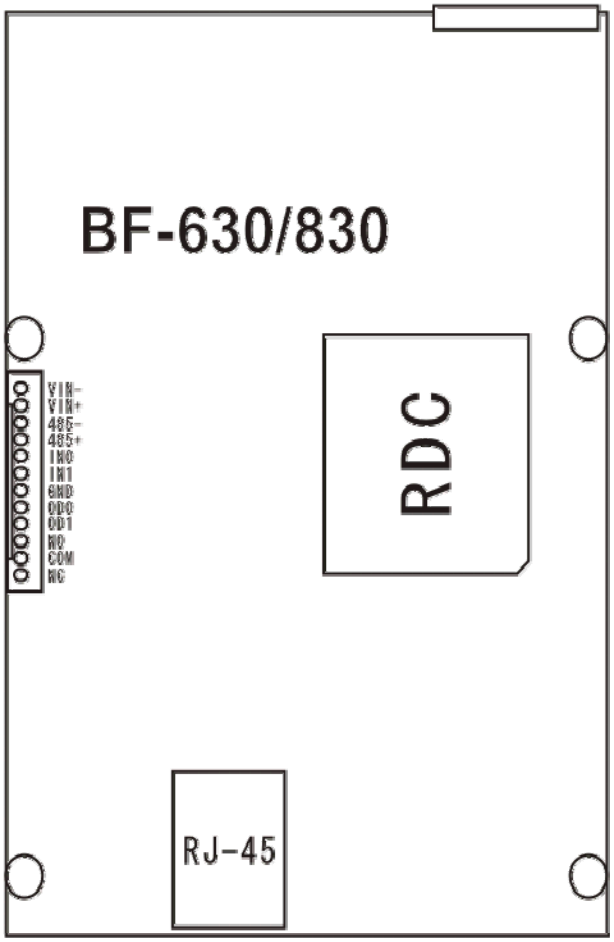
## 6.11 Input

- 10 Numeric key+ 6 Function key

## 6.12 Display

- 1 Buzzer
- 1 LCD：128 X 64
- 3 LED

# 7、Terminal Block definition




BF-630W

| | | |
|---|---|---|
| Power | VIN- | DC12V- |
| | VIN+ | DC12V+ |
| RS485 | 485- | Connect to BF-20 and then connect to wiegand reader from the other side for door control |
| | 485+ | |
| Exit Button | IN0 | VIN+ SHORT to trigger relay for door open |
| Exit Button | IN1 | VIN+ SHORT to force trigger relay for door open (door open always) |
| GND | GND | |
| Wiegand Out | OD0 | Output card number to controller |
| | OD1 | |
| Door lock Relay | NO | Door lock relay (NC) |
| | COM | Door lock relay(COM) |
| | NC | Door lock relay(NO) |